



Variation in sensory profile between individual Rainbow trout from the same production batch

Hyldig, Grethe; Green-Petersen, Ditte

Publication date:
2010

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):
Hyldig, G., & Green-Petersen, D. (2010). *Variation in sensory profile between individual Rainbow trout from the same production batch*. Abstract from 4th European Conference on Sensory and Consumer Research, Vitoria-Gasteiz, Spain.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

[P2.030]

Variation in sensory profile between individual Rainbow trout from the same production batch

D. Green-Petersen*, G. Hyldig

DTU, Denmark

The variation in sensory properties between individual Rainbow trout (*Oncorhynchus mykiss*) belonging to the same aquaculture production batch was explored by using objective sensory profiling on minced and heat treated fillets. Additionally, Quality Index, mechanical texture, pH, fat and water content were measured. 30 fish, all from the same production batch, were sampled at three different times making three groups (ten fish each time). The results showed differences in the sensory profile between individual fish within all three groups. Also sensory differences between the three groups of fish were found. Similar differences in mechanical texture were found between individuals in two of the three groups and between the groups. No differences were found in Quality Index neither between individuals nor groups. A significant correlation between lipid content and firm texture was observed, but in general, the results from the chemical and physical measurements were not able to explain the differences found in the sensory profiling or in the mechanical texture. The results showed that significant difference in sensory profiles of individual fish from the same aquaculture production batch can be present. Furthermore, the results also show sensory difference between groups of samples taken at different times during a product day.

Based on the conclusion from this study, it is generally recommended that in future experiments where objective sensory measurements are performed on aquaculture produced fish, all sensory assessors get samples from the same fish if possible. Additionally it is recommended that the number of replicates used in experiments where sensory analysis is performed on aquaculture-produced fish is carefully considered, making sure that a sufficient number of samples are used to obtain a valid conclusion.

Keywords: Descriptive analysis, individual differences, Rainbow trout